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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/994,990	11/09/2001	Christopher D. Immer	KSC-12139-1	9113
75	90 05/23/2003			
Randall M. Heald			EXAMINER	
Patent Counsel National Aeronautics and Space Administration Mail Code: CC-A/John F. Kennedy Space Center Kennedy Space Center, FL 32899			FERGUSON, MARISSA L	
				,
		_	DATE MAILED: 05/23/2003	7

Please find below and/or attached an Office communication concerning this application or proceeding.

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Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO./
CONTROL NO.

FILING DATE
FIRST NAMED INVENTOR /
PATENT IN REEXAMINATION

ATTORNEY DOCKET NO.

EXAMINER

ART UNIT PAPER

11

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner for Patents** 

It was brought to examiner's attention that a wrong action was mailed to the attorney and due to the mistake the correct action will be sent as well as a restarted time period

MAX NOORI PRIMARY EXAMINER

MLL

•	Application No.	Applicant(s)				
Office Action Summary	09/994,990	IMMER ET AL.				
omec Addon dammary	Examiner	Art Unit				
The MAILING DATE of this communication ap	Marissa L Ferguson	2855				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on 17	December 2002 .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Ti	his action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>						
4) Claim(s) 1-27 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-12,19 and 21</u> is/are rejected.						
7)⊠ Claim(s) <u>13-15 and 20</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.  If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
<ul> <li>a) The translation of the foreign language provisional application has been received.</li> <li>15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>						
Attachment(s)						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s)</li> </ol>	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				

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### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5,11,12,19 and 21 are rejected under 35 U.S.C. 102(b) as anticipated by Schoenecke (U.S. 2,207,898) in view of Moracchini et al. (U.S. 5,747,674).

Schoenecke teaches a pressure test apparatus and method comprising, a fitting (1) having an input (3) to receive a pressure input and an output (11) to receive a pressure transducer (Master Gauge A), a valve (5) attached to the fitting near the input (13). However, Schoenecke does not explicitly disclose a variable chamber with first and second selectable volumes, wherein a piston selects the first and second volumes. Moracchini et al. teaches a device for measuring pressures and temperatures that discloses a chamber with variable volumes (Abstract), wherein a piston selects the first and second volumes (Column 4, Lines 27-30).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention taught by Schoenecke to include the variable volumes as taught by Moracchini et al. for the purpose of controlling selective transfers of phases between the two chambers.

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### Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3,4,6 and 7 are rejected under 35 U.S.C.103(a) as being unpatentable over Schoenecke (U.S. 2,207,898) in view of Moracchini et al. (U.S. 5,747,674) as applied to claims 1, 2, and 5 above, and further in view of Geiger (U.S. Patent 4,730,789).

Schoenecke, as modified, teaches the invention, however he does not explicitly disclose a piston that moves in response to an electro magnet and a valve that can be opened/closed remotely. Geiger discloses a piston that moves in response to an electro magnet and the valve that can be opened/closed remotely (Column 17, Lines 36-68)

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention taught by Schoenecke, as modified, to include a piston and an electro magnet as taught by Geiger for the purpose of moving the piston a predetermined displacement.

3. Claims 8-10 are rejected under 35 U.S.C.103 (a) as being unpatentable over Schoenecke (U.S. Patent U.S. 2,207,898) in view of Moracchini et al. (U.S. 5,747,674) as applied to claim 5 above, further in view of Kluth (U.S. Patent 5,582,064).

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Schoenecke, as modified, discloses the claimed device a primary tube (1) having a first and second opposite ends (3 and Figure 1), except he does explicitly disclose a secondary tube attached to the primary tube between the first and second ends, wherein the secondary tube contains the piston, and the secondary tube is attached generally perpendicular to the primary tube.

Kluth discloses a secondary tube (25) attached to the primary tube (1) between the first and second ends (Figure 6), wherein the secondary tube contains the piston (24), and the secondary tube is attached generally perpendicular to the primary tube (Figure 6).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the device of Schoenecke, as modified, to include the secondary tube attached generally perpendicular to the primary tube, as per the teachings of Kluth, for the purpose of measuring several pressures with different characteristics that are adjacent to each other.

### Allowable Subject Matter

4. Claims 13-15 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L Ferguson whose telephone number

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is (703) 305-3194. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other (F) 7:30am-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Marissa L Ferguson Examiner Art Unit 2855

Met

May 22, 2003